

REMARKS

Claims 1-40 remain pending in the application. Reconsideration is respectfully requested in light of the following remarks.

Section 112, Second Paragraph, Rejection:

The Examiner rejected claims 5 and 32 under 35 U.S.C. § 112, second paragraph, as indefinite. The Examiner states that “reading” in claims 5 and 32 does not have antecedent basis. However, Applicants note that the limitation “reading ...” is introduced in line 6 of independent claims 1 and 28, which clearly provides proper antecedent basis for “said reading” in claims 5 and 32, respectively.

Section 102(e) Rejection:

The Office Action rejected claims 1-5, 7-10, 12-20, 22-25, 28-32, 34-37, 39 and 40 under 35 U.S.C. § 102(e) as being anticipated by Tanaka et al. (U.S. Patent 6,633,538) (hereinafter “Tanaka”). Applicants respectfully traverse this rejection for at least the following reasons.

In regard to claim 1, Tanaka does not teach storing in a persistent repository an indication of which of a plurality of fabric devices are online for a host system to be accessible from the host system. Tanaka does not pertain to a host system for which fabric devices are brought online to be accessible to the host system. The Examiner has not identified which element of Tanaka he believes corresponds to the host system of claim 1. Nor has the Examiner identified which elements of Tanaka he believes correspond to the fabric devices of claim 1. Therefore, the rejection is unclear and improper. Tanaka clearly does not teach a host system for which fabric devices are brought online to be accessible to the host system. Instead, Tanaka teaches a node representation system in which each node refers to an address management table and monitors the node of an entry next from its entry in the table so each node monitors its

next node while being monitored by the node of the preceding entry. *See* Tanaka, Abstract & Fig. 3.

Tanaka clearly does not teach storing in a persistent repository an indication of which of a plurality of fabric devices are online for a host system to be accessible from the host system. The Examiner refers to the data server described at col. 8, lines 12-67 of Tanaka. However, this portion of Tanaka clearly describes the data server as only storing “master identification information indicating which node is the master node.” The master identification information stored by the data server in Tanaka has absolutely nothing to do with indicating which of a plurality of fabric devices are online for a host system to be accessible from the host system. Instead, Tanaka’s data server only indicates which node is the master node. Furthermore, the data server in Tanaka is not described as a persistent repository that maintains data across a reboot of the host system. Neither the portion cited by the Examiner nor any other portion of Tanaka teaches storing in a persistent repository an indication of which of a plurality of fabric devices are online for a host system to be accessible from the host system.

Further in regard to claim 1, Tanaka does not teach reading the persistent repository following a reboot of the host system to determine which fabric devices were online prior to the reboot. The Examiner refers to col. 5, lines 12-20 of Tanaka which states:

When the master node 110 is activated, the activation control process unit 111A refers to an address in the address management table 112A, and sets up in such a way that the master node 110 may function as a master node and may monitor a node with a specific address.

When the master node 110 detects a failure in a slave node 120, the failure monitoring/representing process unit 111B takes over and performs both the functions provided by the slave node 120 stopped due to the failure, and the monitoring of a node to be monitored by the slave node 120.

Applicants fail to see how this portion of Tanaka has any relevance whatsoever to the limitations of claim 1. This portion of Tanaka describes how a master node performs the functions of a slave node when a failure in the slave node is detected. This clearly has

absolutely nothing to do with reading a persistent repository following a reboot of a host system to determine which fabric devices were online prior to the reboot.

Further in regard to claim 1, Tanaka does not teach requesting the fabric devices that were online prior to the reboot to be brought online for the host system.

The Examiner refers to col. 5, lines 20-27 of Tanaka which states:

The resource duplication process unit 111C transmits a resource duplication request to a slave node 120 whose resource is to be duplicated, makes another slave node 120 or the master node 110 represent both the functions (services) provided by the slave node 120 and the monitoring of other nodes when each slave node 120 stops by receiving the notice, and simultaneously duplicates the latest resource stored in the master node to each slave node 120.

Applicants fail to see how this portion of Tanaka has any relevance whatsoever to the limitations of claim 1. This portion of Tanaka clearly mentions absolutely nothing about bringing the same fabric devices online for a host system that were online for the host system prior to a reboot of the host system.

The Examiner also refers to col. 10, lines 24-50 of Tanaka which states:

Next, a process flow at the time of a failure is described with reference to FIG. 6. This flow shows a flow of a process to be activated when a failure, etc. is detected in each node, and is terminated when the process is completed.

A first pattern of a failure occurrence is a case where a failure occurs in a slave node 120. Here, a case is taken where node 3 fails, node 4 fails, and then node 3 is restored while node 4 is still failed.

When a failure occurs in node 3, node 2 monitoring node 3 detects the abnormality (step S301). Then, node 2 obtains a virtual IP address corresponding to node 3 (node 3 virtual IP address) from its own address management table 122A or the address management table 112A of the master node 110 (step S302). Then, in node 2, the virtual IP address of failed node 3 is made effective (step S303). Thus, node 2 can represent the functions originally provided by node 3.

Then, node 2 obtains the real IP address of node 4 monitored by node 3 (that is, the node 4 real IP address of an entry next to an entry in which a node 3 virtual IP address is set, in the address management table 112A) from its own address management table 122A or the address management table 112A of the master node 110 (step S304), and adds the real IP address to the monitoring address list 122B of node 2 (step S305).

Thus, node 2 also monitors failures in node 4 to be originally monitored by node 3, and transmits a heart beat signal (health signal) to the node 4 real IP address (node 4) at predetermined time intervals after that until node 3 is restored.

Applicants fail to see how this portion of Tanaka has any relevance whatsoever to the limitations of claim 1. This portion of Tanaka describes how a node obtains the IP address of a failed node so it can represent the functions of the failed node. This clearly has absolutely nothing to do with requesting that the fabric devices that were online prior to a reboot of the host system be brought online for the host system.

In regard to claim 14, Tanaka does not teach a host system that has one or more adapter ports for coupling to a fabric, wherein a plurality of fabric devices attached to the fabric are visible to the host system through one of said adapter ports. Tanaka does not pertain to a host system for which a plurality of fabric devices attached to a fabric are visible to the host system through an adapter port of the host system. The Examiner has not identified which element of Tanaka he believes corresponds to the host system of claim 14. Nor has the Examiner identified which elements of Tanaka he believes correspond to the fabric devices of claim 14. Therefore, the rejection is unclear and improper. Tanaka clearly does not teach a host system for which a plurality of fabric devices attached to a fabric are visible to the host system through an adapter port of the host system. Instead, Tanaka teaches a node representation system in which each node refers to an address management table and monitors the node of an entry next from its entry in the table so each node monitors its next node while being monitored by the node of the preceding entry. *See* Tanaka, Abstract & Fig. 3. The Examiner refers to col. 5, lines 4-11 of Tanaka. However this portion of Tanaka simply describes a master node, not a host system for which a plurality of fabric devices attached to a fabric are visible to the host system through an adapter port of the host system. The address management table in Tanaka does not indicate that a plurality of fabric devices attached to a fabric are visible to the host system through an adapter port of the host system. Instead, Tanaka clearly describes that the address management table is used to indicate the order in which one node monitors another node.

Further in regard to claim 14, Tanaka does not teach a fabric driver configured to interface the host system to the fabric, and an application configured to request the fabric driver to bring online a selected subset of the fabric devices for access from the host system. The Examiner refers to col. 6, line 61 – col. 7, line 2 of Tanaka which states:

The resource duplication designation process unit 131A provides an interface for displaying a resource duplication designation screen on the display unit 132 of the control node 130 in order to duplicate a desired resources from the master node 110 to the slave node 120, and enabling a user, such as a system manager, etc. to instruct the master node 110 to execute a resources duplication process for a designated slave node 120 from the input unit 133 through the screen.

Applicants fail to see how this portion of Tanaka has any relevance whatsoever to the limitations of claim 14. Using a resource duplication designation screen of a control node to duplicate resources from a master node to a slave node has absolutely nothing to do with a fabric driver bringing online a selected subset of fabric devices for access from the host system.

The Examiner also refers to col. 15, lines 1-22 of Tanaka which states:

By these processes the master node 110 starts normally operating with the latest resource (step S409).

FIG. 9 shows a resources duplication designation screen 200 being an example of the resources duplication designation screen for designating in such a resources duplication process. The resources duplication designation screen 200 comprises a duplication source 210, a duplication designation check box 220, duplication addresses 230 (230-1 to 230-6) and a duplication start button 240. The duplication source 210 indicates a node from which a resource is duplicated, and usually is a label indicated "Master node". The duplication designation addresses 230 are labels indicating nodes being duplicated. In order to duplicate the master node 110 to a certain duplication designation address 230 (for example, a slave node 2), the duplication designation check box 220 to the left of the duplication 230 address 230 (230-2) is clicked (selected) using an input unit 133, such as a mouse, etc. Such designation of duplication can also be made for an arbitrary number of slave nodes 120 and the master node 110, that is, a plurality of nodes can be simultaneously designated.

This portion of Tanaka describes the duplication of resources from one node to one or more other nodes. This portion of Tanaka teaches nothing of a fabric driver configured to

interface the host system to the fabric, and an application configured to request the fabric driver to bring online a selected subset of the fabric devices for access from the host system. A duplication designation screen of a control node that provides for duplicating resources from one master/slave node to other master/slave nodes is not the same as an application configured to request a fabric driver to bring online a selected subset of the fabric devices for access from the host system.

Furthermore, the Examiner has not identified which elements of Tanaka he believes correspond to the host system, adapter port, fabric devices, fabric driver, application and persistent repository recited in claim 14. Therefore, the rejection is unclear and improper. **As required by 37 CFR 1.104(c)(2), Applicants request that the Examiner specifically identify which elements of Tanaka he believes correspond to the host system, adapter port, fabric devices, fabric driver, application and persistent repository recited in claim 14.** In particular, the Examiner should refer to reference numerals in the Figures of Tanaka and specific elements in the specification of Tanaka.

Further in regard to claim 14, Tanaka does not teach that the fabric driver is further configured to attempt to online the selected subset of fabric devices and indicate to the application which ones of the selected subset are successfully online. The Examiner refers to col. 8, line 58 – col. 9, line 15 of Tanaka. This portion of Tanaka describes how a slave node obtains and verifies its virtual IP address. A slave node confirming its IP address clearly has absolutely nothing to do with a fabric driver attempting to online a selected subset of fabric devices and indicating to an application which ones of the selected subset are successfully online.

Further in regard to claim 14, Tanaka does not teach that the application is further configured to store in a persistent repository an indication of the fabric devices that are successfully online. The Examiner refers to the data server described at col. 8, lines 12-67 of Tanaka. However, this portion of Tanaka clearly describes the data server as only storing “master identification information indicating which node is the

master node.” The master identification information stored by the data server in Tanaka has absolutely nothing to do with an application storing in a persistent repository an indication of the fabric devices that are successfully online. Instead, Tanaka’s data server only indicates which node is the master node. Furthermore, the data server in Tanaka is not described as a persistent repository that stores an indication of the fabric devices that are successfully online. Neither the portion cited by the Examiner nor any other portion of Tanaka teaches an application storing in a persistent repository an indication of the fabric devices that are successfully online.

Furthermore, the one or more adapter ports, fabric driver and application recited in claim 14 are all part of a single host system. However, the Examiner refers to functionalities of various different control, master and slave nodes in Tanaka. Tanaka clearly does not teach a single host system having one or more adapter ports, a fabric driver and an application, as recited in claim 14.

Similar arguments as recited above for claim 1 apply to independent claim 28. Also, the Examiner has not identified which element of Tanaka would correspond to the computer readable medium recited in claim 28. Therefore, the rejection of claim 28 is further improper.

Applicants also specifically traverse the rejection of each of the dependent claims. The sections of Tanaka cited by the Examiner appear to have little relevance to the limitations of the dependent claims. For example, in regard to claim 2, the Examiner refers to updating master identification information described in Tanaka at col. 17, lines 5-15. However, the changes to master identification information through the control node in Tanaka has nothing to do with updating a persistent repository to reflect that an unavailable fabric device is offline. In regard to claim 3, the Examiner refers to notification of a slave node to monitor a specific node as described in Tanaka at col. 6, lines 14-23. However, notifying a slave node to monitor a specific node clearly does not teach receiving a notification that a fabric device is no longer available, wherein said receiving a notification comprises receiving an event from a fabric driver executing on

the host system. In regard to claim 4, the portions of Tanaka cited by the Examiner clearly make no mention of determining whether each of the I/O ports is coupled to one or more direct attach devices or to the fabric and discovering or not discovering devices based on this determination. Tanaka does not make any distinction between ports for direct attach devices and ports for fabric devices. The rejection of each of the other dependent claim is similarly unsupported by the teachings of Tanaka. Since the independent claims have been shown to clearly distinguish over Tanaka, a further discussion of the dependent claims is not necessary at this time. However, many more distinctions can be pointed out.

Applicants remind the Examiner that anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. M.P.E.P 2131; *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). The identical invention must be shown in as complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). As discussed above, Tanaka clearly does not anticipate any of Applicants' claims.

Section 103(a) Rejections:

The Office Action rejected claims 6, 11, 21, 26, 27, 33 and 38 under 35 U.S.C. § 103(a) as being unpatentable over Tanaka in view of Allen et al. (U.S. Patent 6,792,479) (hereinafter "Allen"), and claim 17 as being unpatentable over Tanaka in view of Blonstein et al. (U.S. Patent 6,016,144) (hereinafter "Blonstein"). Applicants traverse these rejections for at least the reasons given above in regard to the independent claims. Allen and Blonstein do not contain any teachings that would overcome the deficiencies of Tanaka noted above in regard to the independent claims. Since the independent claims have been shown to clearly distinguish over the cited art, a further discussion of the dependent claims is not necessary at this time. However, if necessary, Applicants reserve the right to present additional arguments in regard to Allen and Blonstein. For example, the television graphical user interface of Blonstein pertains only to televisions and is

clearly not suggestive of a graphical user interface for a system administrator to select devices from a list as a selected subset of the fabric device to be brought online.

Information Disclosure Statement:

Applicants note that an electronic information disclosure statement was submitted on November 15, 2004. Applicants have not yet received from the Examiner the signed and initialed list of references from that IDS. Applicants request that the Examiner carefully consider the listed references from the electronic IDS of November 15, 2004 and return a signed and initialed copy of the list of references. A copy of the IDS of November 15, 2004 is included herewith for the Examiner's convenience.

CONCLUSION

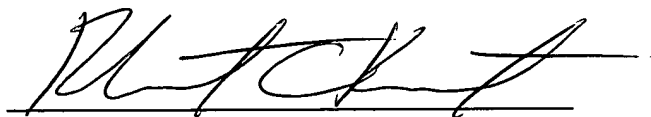
Applicants submit the application is in condition for allowance, and notice to that effect is respectfully requested.

If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above referenced application from becoming abandoned, Applicants hereby petition for such extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5181-79300/RCK.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☐ Petition for Extension of Time
- ☐ Notice of Change of Address
- ☐ Fee Authorization Form authorizing a deposit account debit in the amount of \$
for fees ().
- ☒ Copy of electronic IDS previously submitted on November 15, 2004

Respectfully submitted,



Robert C. Kowert
Reg. No. 39,255
ATTORNEY FOR APPLICANT(S)

Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C.
P.O. Box 398
Austin, TX 78767-0398
Phone: (512) 853-8850

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